PUBLIC SAFETY COMMITTEE

12-0476R

RESOLUTION AWARDING A CONTRACT TO M & T FIRE SAFETY, INC., FOR THE TAX-EXEMPT PURCHASE AND DELIVERY OF SIXTEEN (16) DRAGER UCF9000 THERMAL IMAGING CAMERAS IN THE AMOUNT OF $162,400.00.

CITY PROPOSAL:

RESOLVED, that the proper city officials are hereby authorized to contract with M & T Fire and Safety, Inc., as recommended by the Duluth fire department in its memorandum to the purchasing division, dated September 12, 2012, and on file with the city clerk as Public Document No._____, for the tax-exempt purchase and delivery of sixteen (16) Drager UCF9000 thermal imaging cameras to be funded 80% by a FEMA (Federal Emergency Management Agency) grant and 20% by a city match as authorized by passage of Resolution 12-0029R accepting such grant and in accordance with city-approved specifications and the vendor's bid as of $162,400.00 ($10,150.00 per unit), terms net 60, FOB destination, payable as follows:

(a) $126,720.00 - Special Projects Fund 210, Dept./Agency 030 (Finance), Div. 3174 (FEMA Grant SCBA), Obj. 5580 (Capital Equipment); and
(b) $35,680.00 - Capital Equipment Fund 250, Dept./Agency 015 (Administrative Services), Div. 2012 (Fiscal Year), Obj. 5580 (Capital Equipment), Project No. CE250-E1213.

Approved:

Department Director

Purchasing Agent

Approved for presentation to council:

Chief Administrative Officer

Approved as to form:

Attorney

Approved:

Auditor

DFD/PRCH JS:DS:le 09/14/2012

STATEMENT OF PURPOSE: This resolution authorizes the purchase of 16 Drager UCF9000 thermal imaging cameras from M & T Fire and Safety, Inc., for the Duluth fire department in the amount of $162,400. The purchase is tax-exempt for personal protective gear.

The purchasing division posted the request for bids August 16, 2012, on the city's website. The purchasing staff received seven responses by the closing date and turned bid responses over to the fire department for expert review.

The fire department's internal committee carefully reviewed each bid to verify completeness and compliance with specifications. The committee found that M & T Fire and Safety, Inc., had the lowest, acceptable bid. Their written evaluation is outlined in the memorandum to the purchasing division.

Thermal Imaging Devices
Bid No. 12-0514
Bid Tabulation
Bid Opening September 6, 2012

Vendor	City/State	$ Base Bid
Johnstone Supply Company *	Blaine, Minnesota	$134,408.32
Infrared Systems Group, LLC **	Lawrenceville, Georgia	$139,200.00
Municipal Emergency Services, Inc. *	Fremont, Nebraska	$146,832.00
M & T Fire and Safety, Inc.	Volga, South Dakota	$159,999.84
M & T Fire and Safety, Inc.	Volga, South Dakota	$162,400.00
Engine 11 Company	Clearwater, Minnesota	$167,872.00
Fire Safety USA	Rochester, Minnesota	$171,200.00
Metro Fire	Ham Lake, Minnesota	$207,280.00

*Did not meet the specifications.
**Did not prove/survive testing.

Requisition No. 12-0514

INTER DEPARTMENT CORRESPONDENCE
City of Duluth, Minnesota
Fire Department

September 12, 2012

TO: Dennis Sears/Lora Eames Purchasing

FROM: Bryan Bushey, Deputy Chief

SUBJECT: Award Recommendation for Thermal Imaging Camera's (12-0514)

Dennis,

Based on the attached letter from our thermal imager committee, I recommend the purchase of the Draeger camera bid submitted by M & T Fire Safety.

The two lowest bidders, from Johnston Supply and MES do not meet minimum bid specifications. Fisher Scott

The lowest bid meeting specifications was from Infrared Systems Group. As indicated in the attached information from my committee, this camera's design and performance did not result in a purchase recommendation.

This means that the lowest acceptable bid was provided by M & T.

This company submitted two bids both with and without cases for the camera's. Both of the bids keep this camera at the same place as the 2nd lowest bid meeting specifications.

I recommend we move the bid for $162,400 forward to the Council as the lowest acceptable bid. With your permission, since it does not influence the ranking of bids, I may defer some of the additional costs associated with purchasing cases for all 16 cameras.

Please note that this purchase is 80 percent grant funded and follows resolution 12-0029R.

Please let me know if you have any questions/concerns.

Thank-you

Re: Thermal Imaging Camera Bids (#12-0514) **Tues. Sept. 11, 2012**

The Duluth Fire Department formed a committee to look into the purchase of new Thermal Imaging Cameras. Our current cameras are a combination of MSA Evolution 4000 cameras purchased in 2001 and SCOTT Eagle X cameras purchased in 2006.

The committee was comprised of the following personnel:
Tom Guntzburger, Charles Smith, Dan Lattner, Matt Swanson, Joe Pyrlik, Andy Golz, and Aaron Bujold.

Initially the committee met with the intention of laying the ground work for purchasing new cameras. This includes the following:

1. Evaluating our current cameras and the features and performance that were liked and disliked.
2. Discussing features and specifications that we would like in new cameras.
3. Discussing the different types and brands of cameras available.
    a. Several members reached out to contacts on other departments to gather information for this purpose.
4. Confirming a list of desired camera models to review.

After this initial meeting and research, the committee decided to proceed with the following steps:

1. Invite the desired manufacturers/representatives in individually to present their cameras to the committee at Fire Headquarters training room. The manufactures that presented were:
    a. Infrared Systems Group (ISG)
    b. Metro Fire (MSA)
    c. Fire & Safety USA (Bullard)
    d. Municipal Emergency Services (SCOTT)
    e. Great Plains Fire (ISI)
    f. M&T Fire & Safety (Draeger)
    g. Engine 11 Co. (Argus) – presented at a later date
2. From the classroom presentations, the committee would evaluate and pick the cameras that would move to the live burn testing.
    a. These included: ISG, MSA, Bullard, SCOTT, and Draeger. Note: Argus was tested at a later date.
3. The live burn testing consisted of two parts:
    a. Day 1 – Smoke/Burn barrel evolution to evaluate the cameras in live heat and smoke scenarios without open burning. Evaluate the cameras and decide which cameras would move to Day 2 testing.
        i. MSA, Bullard, ISG and Draeger were selected to move on.
    b. Day 2 – Live room and contents fires to evaluate the cameras in real life situations. Evaluate the cameras for performance and need for further testing.

4. Note: Both of the live burn testing and evaluations were done without the presence of manufacturers/representatives. Also, all cameras tested were evaluated and examined under the same conditions.

After all testing was completed the committee met through a series of email conferences and discussing the findings from the live burn evolutions. The recommendation after the testing was unanimous, with the Draeger camera the choice of the committee.

Over the next several months, Draeger, Bullard, MSA, and ISG cameras were given to the DFD to place on our fire apparatus for further testing. The members of the apparatus that operated the cameras were questioned as to the conditions, operations and performance of the cameras. Their experiences reaffirmed what the committee found in our own testing. Again it was unanimous that the Draeger was the leading camera.

After the bid specs were written and bids had been submitted, the committee met and reviewed the bids for accuracy, price and if they met the specification. The lower bids of Johnston Supply (FLIR) and MES (SCOTT) were dismissed because they did not meet the spec for numerous reasons.

Based on all of the above information the following is a summary of the reasons why the committee is not recommending the ISG camera:

1. Field of view appeared much narrower, resulting in decreased screen view.
2. Considerable screen "freezing" when panning with the camera.
3. User selectable color palates were very confusing and not useful.
4. The three gain modes were confusing and seemed to add to the freezing screen issue.
5. The button configuration and type were difficult to use.
6. Lost view of the subject near and behind the fire during live burn testing.
7. Image quality was not as good as Draeger.
8. The picture seemed to be dark and hard to see at times.

Respectfully submitted by:

Tom Guntzburger
Charles Smith
Dan Lattner
Matt Swanson
Joe Pyrlik
Andy Golz
Aaron Bujold